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ABSTRACT

The title reflects the first and major article in an issue of this newsletter devoted heavily to video technology. The flexible capabilities of videotape used with microteaching are presented and illustrated with case studies of childhood education and rural health development programs in Nigeria, improvement of nurses' communication skills, and development of executives' helping skills. Other articles include a comparison of advantages and disadvantages of videotape versus film, a case study of the training of managers of newly established farm cooperatives in Peru, an interview on the background and goals of the Mauritius College of the Air, suggestions for appropriate research for educational technology in developing countries, hypotheses and suggestions for research on television broadcasting for rural community development, and a training strategy for women-to-women development and communication networks in third world countries. (CMV)

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VIDEO & MICRO-TEACHING:

ADAPTABLE MEDIUM, ADAPTABLE METHOD

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Video & Micro-Teaching: Adaptable Medium, Adaptable Method

The elemental ingredients of the micro-teaching concept are 1) communication techniques, 2) the teach-reteach dimension, and 3) immediate feedback. The first dimension, communication techniques, reflects the assumption that the complex communication act can be broken down into relatively easily learned skills, a repertoire of which enables a person to communicate in a variety of situations. Listening, questioning, and closure are a few examples of such techniques.

The second dimension, teach-reteach, is a process whereby a person makes a presentation, receives and internalizes feedback on that performance, incorporates suggested improvements, and then redoes the presentation to analyze by comparison the results of the changes.

The third dimension, immediate feedback, actually has three aspects: 1) subject feedback, 2) videotape feedback, and 3) supervisor feedback. Subject feedback is that from the "client," who receives the presentation and the chance to express feelings about its strengths and weaknesses. Videotape feedback, in contrast, gives the presenter the opportunity to assess a completed presentation, to view himself as he actually appeared and to compare other types of feedback to the presentation. The third aspect, supervisor feedback, links the subject feedback and the videotape feedback: the supervisor assists the learner by suggesting strategies and alternatives and by helping plan for the reteach session.

A crucial aspect of the micro-teaching process is the self-confrontation facilitated by the use of videotape. Although videotape is fairly new on the educational scene, initial reports by researchers and educators on videotape feedback are optimistic. They suggest that specific and complex behaviors under the teacher's control can be changed by utilizing videotape feedback in various settings and that videotape feedback in the context of micro-teaching can help students perform significantly better in the classroom. Videotape feedback also possesses the demonstrated potential for increasing the accuracy of teachers' self-assessments.

On the other hand, some evidence indicates that videotape feedback can be stressful and demanding and that teachers' lack of receptivity to videotape feedback can reduce its effectiveness. Recent literature also suggests that when a person watches a videotape alone and without formal appraisal, dissonance (the difference between what a person hopes to see and actually sees) appears to remain low, and any discrepancies can be easily overlooked. Indeed, various studies show that some type of personal, written, or verbal focusing must accompany videotape playback if significant behavior changes are to result.

Ultimately, the potential for helping people improve seems to depend partially on the characteristics of the users, the setting, and the type of confrontation. But, at least, in micro-teaching with videotape-feedback, one confronts one's *learned* performance, not one's *personal* traits and attributes — which can be more painful to face.

In its broadest sense, micro-teaching provides an opportunity to present something and then assess the outcome of that presentation — to *see* oneself in action and to *analyze* what happened. Videotape media usually serve as a mirror. The format is variable, ranging from a formal micro-teaching session to a videotape of a segment of real life. Less important than the setting are the situation and the content under examination. The crucial aspect is self-confrontation.

The cases described below all involve micro-teaching and self-confrontation. The variable is the institutional setting, while the common factor is the modification of the micro-teaching concept to fit peculiar needs. Taken together, these uses show that micro-teaching is dynamic rather than static, that it can be adapted to achieve a variety of goals.

Case Study 1: Alvan Ikoku College of Education, Nigeria

Nigeria has recently insituted a universal childhood education program that entails solving a number of problems, chief among them the training of an estimated 40,000 additional teachers. In response to these concerns, the staff of the Alvan Ikoku College of Education in Owerri has been experimenting with ways to turn out more newly qualified teachers and more teacher trainers. With the assistance of UNESCO, the UN Development Program, and UNICEF, AICE joined forces with the East Central State Ministry of Education and the State School Board to conduct a one-week workshop for re-orienting teachers.

After micro-teaching and its place in a teacher-education program were discussed, videotapes of micro-teaching sessions were shown and descriptive written materials distributed. Participants were then divided into groups to develop a five-minute lesson on any subject that they could feature teaching to five primary-school pupils. They were told the lesson would be videotaped. Once the participants had taught and viewed their micro-lessons, they returned to the larger group to discuss the experience and to receive information on interaction analysis, classroom observation, and supervision. The participants also viewed some Nigerian-made model tapes illustrating various classroom-teaching skills.

The participants then spent two days developing, teaching, and analyzing, with the use of videotape, micro-lessons that had been taught to primary-school children. One day was devoted to classroom presentation skills, and the other day to developing questioning skills. The teacher trainers then met collectively to discuss the process and to brainstorm on ways to build this process into the existing teacher-training curriculum. Time was also set aside for learning to use the videotape equipment and to produce model lessons.

At the course's end, each participant anonymously completed an evaluation form. The 120 participants who completed the form generally considered the micro-teaching sessions and experience with videotape media relevant to their professional development. In particular, they valued the opportunity to see, analyze, and criticize their own teaching, as well as to watch others teach.

Case Study 2: Nurses Improve Communication

A nurse discusses with four colleagues the appropriate range-of-motion exercises used to rehabilitate a patient with limited use of the lower arm and the hand. A routine occurrence in the nursing world? No. The nurse in question was giving a presentation not to share information but to improve her ability to communicate. The nurse, her colleagues, and a supervisor later viewed a videotape of her presentation, identifying its strengths and its weaknesses. They agreed that she was talking too fast and leaving others out of the discussion. Armed with some constructive suggestions, the nurse then repeated the presentation to different nursing colleagues — a videotape of which revealed a decided improvement.

In nine sessions in three days, nurses involved in this training seminar tried out and studied seven communication techniques. The preliminary session was designed to familiarize the nurses with the procedure, help them assuage initial jitters, and help them overcome the "cosmetic effect" of seeing and hearing oneself on television for the first time. The supervisor's role in Session 1 was merely to point out positive aspects. Session 2 focused on the relatively easy-to-grasp skill of using set-induction to begin a presentation. Like subsequent sessions, part 2 followed the teach-reteach cycle: each nurse tried, evaluated, replanned, and retaught each skill. The third session covered questioning, a first step in reducing the nurses' talk and increasing the recipients' participation. In session 4, the concept of reinforcement was introduced. Since the nurses' audiences had begun to participate more fully, the nurses needed to recognize the positive effects of rewarding such participation. Session 5 focused on probing questions, those that require a more substantial response than "yes" or "no."

In Session 6 the participants examined their gestures and behavior during their short presentations. They learned to vary the stimulus — to use a combination of activities such as moving around the room, altering the pace of the presentation, varying the tone of voice, and so on to help rivet attention and increase interest. Session 7 reinforced this notion by concentrating on the skill of using examples to clarify a concept, illustrate a point, or introduce new knowledge. In Session 8, the participants practiced the skill of "closure," relating the main points to each other and summarizing key concepts in the presentation. Session 9 was devoted to giving each nurse the chance to tie together all of the skills introduced.

Eighty-five percent of the participants, learner evaluations showed, felt anxious or nervous before their first micro-teaching session, and 90 percent were not sure they wanted to take part at all. However, by the end of the three days, all of the nurses saw the value of the experience. All appreciated the focus on specific skills, and half felt that the pace of learning was comfortable (45 percent contending that each skill deserved more time). All of the nurses agreed that watching themselves on videotape was extremely valuable, and most (70 percent) considered student feedback helpful.

Case Study 3: Executives Develop Helping Skills

Researchers once thought that training could not affect interpersonal communication significantly. But research based on modern counselling and education techniques indicates interpersonal communication can be improved if the components of the communication process are defined so that they can be interjected into a learning program. Once the communication process is broken down serially into skills that can be dealt with one at a time and integrated, structured training can be viewed as providing opportunities to practice those skills in a "failsafe" situation with the benefit of immediate feedback.

The skills used as the basis of executive training, which utilizes both micro-teaching and videotape, are not new, but they are not known and used enough. Built into a repertoire, these skills can help people overcome problems that are the subject of such commonly voiced complaints as "He says something and denies it at the next meeting" or "She interrupts me."

Poor communication habits sometimes betray a lack of respect for the co-worker. But sometimes even well-intentioned executives unwittingly commit these small crimes. They need to review certain basic helping skills:

- *Attending Behavior:* Demonstrating interest in the speaker's words by maintaining eye contact and avoiding changes of topic
- *Leading:* Directly or indirectly inviting verbal expression and opening the lines of communication
- *Focusing:* Pinning down a topic or sub-topic to explore when a discussion rambles or otherwise gets out of hand
- *Questioning:* Eliciting, on the one hand, maximum response and exploration and, on the other, "yes-no" answers
- *Clarifying:* Expressing genuine interest in the other person's perceptions of a situation and coming to grips with those perceptions
- *Reflecting feeling:* Expressing, acknowledging, and sharing feelings arising during a conversation
- *Respecting:* Displaying a positive regard for the speaker's feelings, experiences, and capabilities
- *Summarizing:* Reviewing and tying together ideas so that all involved understand what occurred and what to do

Executive training has helped increase participants' confidence in their communication abilities and their awareness of various communication options. Its success shows that interpersonal communication can be consciously improved.

Case Study 4: Rural Health Development

A recent UNICEF-sponsored investigation of the procedures in use in Nigerian regional health-training centers revealed that what was needed was not advice on formal education methods but rather some help in using "nonformal" education techniques. Subsequently, the micro-teaching format, in this case without videotape, was adapted to serve this purpose. Emphasis was placed on the use of existing media and uncomplicated techniques, including silk-screening and demonstrations.

In an experiment aimed at making better use of silk-screening's potential, each of five health agents was asked to prepare and present a 10-minute lesson on how leprosy could be presented visually. Then, all the concepts presented were critiqued and the most promising further developed. As it turned out, the discovery, care, and treatment of leprosy could be portrayed in sequential silk-screen posters that could be printed in volume in both English and Igbo (the local language) for use by the itinerant rural health agents and in village centers.

Another experiment, this one aimed at developing a better means than lecturing for conveying health information to villagers, grew out of discussions with the directors of the rural health centers. The goal was to approach one health topic — basic sanitation — in a novel way, using the micro-teaching concept to stimulate agents to consider demonstration and other instructional modes besides lecturing. To start, ten agents were told the difference between a demonstration lesson and a lecture and asked to develop a 15-minute demonstration lesson on a basic sanitation problem. Each agent presented his demonstration to the other nine agents and a supervisor (the author), who jointly analyzed the forms of the demonstrations and their content. The group then decided that showing villagers how to build a basic sanitation facility might be a better teaching mode than lecturing. This revelation, which was not imposed from outside, prompted the agents to revise their entire curriculum to accommodate the demonstration mode.

These four case studies illustrate that micro-teaching (with or without videotape) can be adapted to meet the needs of radically different audiences. While all the experiments were aimed at improving communication, each approached the task differently. The Nigerian college program took place in a one-week in-service course involving primary students; the nursing program took place in a three-day training seminar for peers; the business executives spent two days in a retreat setting; and the rural health-agents program, highly informal, was wedged between the agent's normal activities. Clearly, the point is that each program used micro-teaching and self-confrontation successfully to meet its own unique needs.

■ *Robert J. Miltz, P.O. Box 301, Maseru, Lesotho*

3/4" video or 16 mm film?

Numerous media combine sound and pictures to communicate with an audience. They range from slide shows to super-8, 16mm, and 35mm film, and from 1/2 to 3/4-inch, 1 and 2-inch videotape. The production costs and quality associated with these media vary, and each medium offers unique advantages. Particularly interesting is a comparison of 16 mm film with 3/4-inch format videocassettes, since these two media are roughly comparable in range of use. Bear in mind, however, the fact that the cost and capability of videotape and film overlap at many points, so the most useful comparisons are those made within the context of a specific project or application.

Costs: In many cases, video offers a significant cost advantage over film. Unlike film, it does not require an elaborate subsystem of machinery and professional capacity for developing and processing. Moreover, the same piece of videotape can be erased and recorded upon numerous times without significant loss of tape quality in most cases; film, in contrast, can only be used once. Then too, animated graphics, special effects, supers, or titles are often less expensive to produce in video than on film.

Still, film may be more appropriate than video in some cases. The best approach for weighing the economic pros and cons is to develop a *detailed* description of what you want to see when you watch the finished program. Then, shop for estimates of the costs of reaching that goal from various film and video producers.

Quality: For some applications, image quality may matter more than production costs. At its best, 16mm film equipment can record a given scene in more detail than video equipment. The video image is sliced into hundreds of horizontal stripes or scan-lines, while the film image is made of tiny grains and appears more natural to the eye. Film is also capable of reproducing more subtle colors and more life-like flesh-tones than video, and it can record a greater range of brightnesses. For example, under lighting conditions that would enable a video camera to record a scene with a white sky, a wall, and a black shadow, a film camera might be able to capture the details of clouds in the sky and the silhouette of a person in the shadow on the wall.

Technical differences like these matter only if they contribute to or detract from the esthetic impact or effectiveness of the program. If you or your audience accord artistic considerations low priority, such differences need not enter into your decision.

Ease of Operation: Film equipment still has a slight edge over video in field situations where maneuverability, rapid set-up, or access to tight places is critical. The advantage resides in the self-containment of the single-system film camera, which records sound on the film and need not be connected by a cable to any separate recording device. (The video camera, on the other hand, must always be connected to a videotape recorder, making moving about more difficult.) Film is also superior where lighting conditions are difficult (where, for example, light is dim or where scenes feature bright light sources). But in most field-shooting situations, both film equipment and modern video equipment are fairly simple and easy to operate.

Flexibility: A unique advantage of videotape is the ability to play back immediately what has just been recorded. This second (or third or fourth) chance enables the videographer to spot and correct errors or omissions that might go unnoticed in a film until after processing and development at the lab. When action is staged or recreated, video also makes recording rehearsals, as well as attempted takes, feasible since unuseable footage can be erased and recorded upon again without incurring an additional cost for tape. Consequently, subjects can watch their own mistakes and successes and see what to correct in the next attempt, if necessary, and the videographer can capture the most natural performance (which is sometimes the one that occurs just before the cameraman working with a limited amount of film begins recording).

The playback feature of videotape can also help create better rapport with the people being photographed. By bringing them out of the goldfish-bowl psychologically, playback enables them to see themselves and their friends in a fascinating new way.

Editing: In the editing process, original field footage on videotape is *copied* onto the master tape on which the program is being assembled, and the original tapes are normally unaltered by the copying process. Original field footage on 16mm film, however, is normally *cut* to order for the specific program in the final stages of the editing process, which makes using footage in a later application relatively difficult.

Display & Distribution: Film can be projected on relatively inexpensive, easy-to-obtain equipment, and the image can be magnified for groups to view. In contrast, the number of people who can comfortably watch the same TV screen is limited, and videotape playback equipment may be more difficult or expensive than film equipment to buy or rent, especially away from urban centers. Video's limitations can be skirted in numerous ways, however. Several TV sets or monitors can be hooked up to the same tape player so that several groups can watch at once. And some projectors now available can produce a picture several feet across, although these new projectors are relatively expensive and can be difficult to set up.

Alternatively, a videotape can be transferred to 16mm film at a cost between perhaps 30 and 100 dollars per minute of program, and extra copies can then be made at regular film-duplication rates. The finest transfers completely eliminate the video scan-lines and produce a pleasing, film-like image. But even at its best, the transferred video image will contain less detail than an image of the same scene shot originally on film, and this difference may prove critical in some applications.

■ *Chapman Mott, Videographer, Houston, Texas*

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MASS COMMUNICATION TECHNOLOGY

a case study in training campesinos

Peru's 15 million inhabitants (half of whom are rural) live on 1,250,000 square kilometers divided into a coastal region, mountains, and tropical forest. In 1969 Peru initiated an agrarian reform that turned almost 30 percent of the land formerly worked by peasants for landowners into cooperatives. It immediately became apparent that the *campesinos* who formed these cooperatives stood in need of technical and management training and of help in bettering their living conditions.

Most pressing was the need to train *campesinos* to organize their cooperative undertakings. The National Center for Training and Research for Agricultural Reform (CENCIRA) was consequently established. A decentralized unit of the Ministry of Agriculture, CENCIRA received technical assistance from FAO and funds from UNDP. In 1976, the Audiovisual Production Center for Training (CEPAC) was established as part of CENCIRA's Communications Division. With financial support from FAO's Technical Cooperation Program and UNDP, the project (FAO Project PER 76/003) is to be operated solely by Peruvians (now in training as counterparts) by 1980.

CEPAC's Activities and Tools

Not defined precisely from the outset, CEPAC's activities were worked out jointly in response to circumstances and givens. Gradually, six activities evolved in this order: staff development, production of courses for *campesino* training, field application of courses, creation of regional audiovisual production centers for specific needs, and guidance of counterparts on personnel development and the installation of Audiovisual Educational Centers.

During these first three years, the project bought educational television equipment worth approximately $60,000. This is low-cost "sub-professional" equipment (whose signal is not compatible with open-channel broadcasting) that is easy to maintain and use, sturdy, and appropriate to the technological realities of Peru. Some of the equipment is portable, some is fixed. Both reel-to-reel equipment and cartridge equipment, all of it bought through open bidding by FAO from Sony, are employed.

The equipment falls into four categories. One is the filming unit, which includes a magnetoscope, a TV camera, and a monitor plus a power system and accessories. Another is the playback unit, which includes a magnetoscope, a TV monitor, cables and a portable power system. The recording unit includes a magnetoscope, a video console, an audio console, a lighting system, cameras, and a control unit, while the editing unit consists of a magnetoscope, one editing console, and TV monitors. Broadcast over an educational TV circuit, course material (much of it taped in the field) is edited in the microstudio, where supplementary material is added. Programs taped in the field are carried back to the *campesinos* via the playback unit. In all phases of planning and production, feedback plays an important part.

A small equipment-maintenance team also works with the training and production staff. Gradually, the methods of preventive maintenance and repair the team employs are being transferred to all production personnel.

Training of Educational-Programming Producers

Personnel training takes place in two stages. The first is an internship that varies from 3 to 5 months, depending on the number of participants and instructors. Interning involves accepting a schedule of 12 to 15 hours a day, six days a week, during which trainees learn how to use the equipment and how to produce educational television programming. The next stage, in theory 4 to 8 months long but actually much longer, is out-of-school in-the-field production involving contact with the *campesinos*.

The courses involve both action and training, both practical and theoretical work. The products made during the course are evaluated during training and can be used later on. To date, CEPAC has given four intensive training courses in educational programming production, in which 94 persons took part. Of the 94, over half now work in project-related jobs; others have been lured by better job offers, and a small number have left the field entirely.

Production of Courses

The production of a course, in all its stages, is carried out by a Production Unit made up of two or three persons. The initial phase consists of a general survey in the field conducted to determine subject matter. It is followed by an academic survey executed in Research Centers or by professionals in the field. Next comes applied research to assure that — along with *campesino* feedback — academic proposals can be and are translated into course materials. Budgets and regulations must also be worked out at this stage. The next steps involve developing and revising first the booklet, then the script. At this point, a production plan is outlined. The later stages are taping in the field, making sound tapes in the production center, producing written materials, editing the course, and printing the booklets for the participants and instructors. The final stage is course evaluation.

CEPAC has so far produced courses on three principal subjects: production technologies, business management, and living conditions. A total of 25 courses made up of more than 300 programs averaging 20 minutes in length have been produced. Three of the courses have been produced in languages other than Spanish, the Indian languages Aguaruna and Quechua, five courses have been translated into Quechua, and nine more are being translated into Aymara and Quechua.

Program Expansion

Approximately 20,000 *campesinos* have taken CEPAC courses to date. In groups of 15 to 40, they sign up, fill out a form to determine previous knowledge, view the class program, participate in an analytical discussion of the program, and watch practical demonstrations.

Beginning in January of 1979, CEPAC will be in a position to train (in modular courses of 20 classes) some 40,000 *campesinos* a year. Training will take place in the *campesinos'* work places, will not need electricity, and will probably cost between $2 and $5 per *campesino*/course.

To fulfill the various needs of a country as large as Peru, regional production centers have been established in Lampa in the province of Puno (to meet the needs of the Altiplano) and in Lambayeque on the coast (to meet those of the north-central zone). Next year, a center will open in Huancavelica to serve *campesinos* in the central mountains and another will begin operations in Iquitos to serve the tropical forest region.

■ *Manuel Calvelo, FAO/CENCIRA Peru (translated by Judy Brace, CDC)*

This article is available from CDC in its original Spanish version upon request.

6

video from another angle

For two variations of the skeptic's view of video's place in development and effectiveness as a mirror of culture, see Caroline Heller's "The Resistible Rise of Video: Some Thoughts on a Technology and Social Change" and Ross Kidd's "The Technology Trap: A Case Study of Video Use in Non-Formal Education in Botswana." Both articles appear in the September issue of Educational Broadcasting International.

An Interview with Kenneth Noyau

DCR's editor conducted this interview in Dijon, France, on June 23, 1978, between sessions of the International Conference on "Economic Analysis for Educational Technology Decisions." In it, the director of the Mauritius College of the Air, Kenneth Noyau, tells how MCA got its start and where it is going.

Kathleen Courrier: Who Founded MCA?

Kenneth Noyau: MCA was created in 1972 by Michael Young (now Lord Young), chairman of the International Extension College. On behalf of the IEC, Dr. Young made an offer to the Mauritian Government: IEC would fund and set up a multimedia center, which it would support for five years, by which time the Government was supposed to be prepared to take it over.

KC: Did all go according to plan?

KN: Not exactly. Before the five-year period was up, the Government had to subsidize the operation. The MCA had been asked to help private secondary schools by providing courses supported by radio and televsion. The demand for the courses was much higher than expected and inflation had set in. After June 1977, the total MCA budget was met by the Ministry of Education.

KC: Were there any strings attached to these government funds?

KN: No. MCA was created by legislative act as a para-statal body, which means it is under the authority of a Board of Trustees and that, to settle matters of policy, we need go no farther than the Ministry of Education. The Ministry officially controlled MCA from the beginning; that control had little to do with funding.

KC: By a "matters of policy," precisely what do you mean?

KN: I *don't* mean minor operating procedures. The Ministry's authority extends primarily to general policy matters, such as the re-orientation of the MCA. Other policy matters, such as questions of recruitment or decisions about program policy, are settled in-house.

KC: What organizational changes accompanied the change of sponsors?

KN: The first major change occured when the expatriate director left in 1974 and I took over. Another was a result of the creation of the Institute of Education, which assumed some of the main functions of the MCA. We had to reconsider MCA's structure and make proposals to the Ministry of Education for a reprientation toward nonformal education, which had always been our main interest.

KC: What have been the main focal points of the reorientation?

KN: First and most important, we decided to become a service organization working in conjunction with all the ministries and organizations interested in adult education in Mauritius. What we wanted, and now have, is an inter-ministerial effort to help Mauritians understand the problems of development, the efforts of various ministries to solve them, and the ways in which average people can do their part to help.

KC: Can you give some examples?

KN: Of course. Every week on TV there's a health program containing motivational information. The Ministry of Health has field officers who go out to the villages and make use of posters and other visual aids for their work, so these officers suggested that we help them develop these materials. At a later stage, we hope to extend our service to the production of a multi-media package.

The content varies, but the same type of proposal has been made to all organizations working on a national scale . . . the National Consumer Council, for instance. With the NCC, MCA has already produced a series of radio programs as a pilot project and has evaluated their impact by setting up listening groups and monitoring the programs. The NCC has now come back to us requesting a second series, this time to be televised.

The important thing to note here is that these programs remain the responsibility of these bodies — they are not MCA programs. We offer to provide the technical know-how in the production of the programs and the support materials, as well as help in utilizing and evaluating them. We hope to set up a whole infrastructure of group leaders and *animateurs*, a model we first experimented with in this NCC program. But the first move is made by the cooperating ministry or agency, not by MCA.

KC: In what sort of production facilities do you manage all this?

KN: Very limited ones. The general aim has been to keep expenses as low as possible and properly assess all the resources at hand. Taking this approach has enabled us to develop slowly without foreclosing the possibility of wide-scale expansion. For example, we now use the services of the local broadcasting station. Although I would like to see MCA in possession of its own studios eventually, it seems more important at the moment to define our activities and create our audience before spending large sums.

KC: Who makes up this audience you are trying to define?

KN: Most of the work done so far has been with the schools. The target audience averaged around 10,000 in the first years. As the Institute of Education has taken over some of our work and adopted some of our methods in the lower forms of the secondary schools, we have been trying to aim our courses at a different audience — mostly out-of-school.

KC: So, you've recently gone through a transition?

KN: We are still going through a transition and had we invested earlier on in expensive equipment and production facilities, we would have been hard-pressed to make full use of it during the transition.

Our school audience is composed of whoever wants the courses, the idea being that forcefeeding is illicit pedagogy. What we have done, therefore, is secure relatively low-cost equipment for radio, tape-recording, and video recording for which we use ¾" cassettes and film-making equipment. Use of this equipment enables us to get pictures from the student's environment instead of relying exclusively on imported materials. Some of this machinery, incidentally, was given to the MCA by various foreign countries and organizations.

KC: I presume that MCA is still evolving and that new programs and emphases will emerge.

KN: Correct. We have just developed a graphics section and are now recruiting our own producers, cameramen, and maintenance technicians. In terms of the clientele, we are catering more and more to out-of-school audiences — ranging from primary-school leavers to adults.

KC: If it is not in bad form to ask, where do you expect to find yourself and MCA in ten years?

KN: I am not sure about myself. I would be interested in helping to launch a new project. I would hope by then to see the MCA fairly well settled in its own production facilities, providing second-chance education and an increased range of programs for adults in a continuing-education system. ■

APPROPRIATE RESEARCH FOR EDUCATIONAL TECHNOLOGY: A DEFENSE AND TWO EXAMPLES

The energy crisis, ecological imbalance, and worldwide inflation have caused many to question unbridled "progress" in the development of consumer luxuries. With technology in general under fire, the concept of "appropriate technology" now needs to be extended to the field of educational technology.

Embracing the concept of "appropriate technology" — which normally refers to economic and production processes that make efficient use of capital, materials, labor, energy, etc. — can help educational technology designers outgrow an excessive fascination with expensive hardware. By the same token, it can help researchers in the field of educational technology abandon unnecessarily sophisticated research methodology.

The field of educational technology needs research to help practitioners fulfill its promise of greater efficacy in teaching and learning. This need is greatest in developing countries because much research already completed in developed countries has to be replicated and validated in the context of different social and cultural realities. In particular, the relative value of equipment produced by various countries and according to various standards has to be assessed, and cost-benefit analyses have to be performed. And basic research on tolerable signal/noise ratios for different ethnic groups cannot be considered complete if based solely on Western data. Similarly, visual and auditory perception and literacy have to be studied anew for emerging cultural and social clienteles. Perhaps most important for developing countries is research on administrative, organizational, policy, and strategic matters.

Whatever the obstacles and fears surrounding research, it remains necessary. Quite simply, disciplined inquiry that adheres to the scientific method affords more confidence in the inferences made from data to reality. Thus, when circumstance makes rigorous sampling or measurement or analysis impossible, it is still wise to gather as much data as possible. After all, a farmer in Bolivia or Iran makes decisions on the basis of his observations; so why can't educators in Bolivia and Iran attempt to understand the social and educational phenomena that interest them, even when the controls and guarantees are missing? Can't they lessen the confusion of unordered data in the name of better decision-making even if their findings don't advance the discipline?

The practical and realistic approach to research in difficult conditions is summed up ably by Wilbur Schramm in "Notes on Instructional Cross-Media Comparison" (1971). Says Schramm,

> "a researcher in a developing country, facing restrictions on random selection and control of treatments, should . . . use less than ultimate designs as long as he is aware of what he is doing, is willing to patch them up by supplementary work and additional analysis, and is scrupulous in not claiming more than he has found."

Reflecting Schramm's dictum, the following two examples show how useful data can be collected and analyzed without recourse to computers or to highly trained research personnel.

THE DATA TREE

Problem one: A manageable research technique for assessing the potential audience of a government educational radio program in Bolivia was needed. The program's producers wanted to know which of several formats (interviews, lectures by a teacher, and dramatized sketches) being considered was the best received by the Quechua-speaking listener, the difference in achievement of the instructional objectives of the lessons as presented in the different formats, and the effect of using Spanish versus Quechua as the broadcast language.

The simple research objectives were complicated by such factors as the distances to the listening communities, the difficulty of gathering together a group of respondents, the lack of Quechua-speaking research help, and a high rate of illiteracy among the respondents. Also, the respondents had little time to devote to this exercise.

The research procedure was built around the use of cassette recordings containing the different "treatments." These recordings were played for the listener as a surrogate for off-the-air broadcasts, and individual interviews were held immediately after the listening session. All responses to such questions as "Did the respondent prefer the format?" or "Did the respondent give evidence of achieving the instructional objective?" were coded in a yes-no fashion. Each respondent's data was entered manually on a separate sheet with basic demographic information about the respondent. The data was then all entered on large sheets of paper marked off in columns and rows (the rows representing the questions asked; the columns the demographic data). More specifically, the columns were arranged in a "tree" fashion. For example, the first horizontal division of the data sheet had 3 sub-divisions, with each of the three columns representing the three communities visited for the evaluation, and each of these three columns was divided into two sub-columns representing male and female. Finally, each "male" and "female" column was divided into two columns (one for those with less than three years schooling and one for those with more). The finished data sheet layout had 12 columns, and one sheet was filled out for each of the treatments.

This "tree" arrangement made visual examination of the results of both total and partial sums immediately accessible. Leaps from scores to crossbreak tables were unnecessary since the crossbreaks could be visually appreciated in terms of the number of check marks in the column representing each demographic category across the rows representing each evaluation question. For example, it was seen that achievement of the instructional objectives was always associated with the amount of schooling for all formats but in differing degrees for different formats.

RESPONSE INSTRUMENT FOR ILLITERATES

Problem two: A literacy-free response instrument for use with adult learners was required by the producers of the same educational radio project in Bolivia. The producers suspected that certain electrophysical characteristics of the signal could have educational consequences, especially in the project's bilingual setting, and they wanted to know the effect of different frequencies and of different signal/noise ratios on learning.

In the absence of previous research on the parameters of intelligibility for the Quechua-speaking listener, the radio educators decided to evaluate for themselves the effects of high-frequency clipping and low signal/noise ratio.

The presentation of the treatments themselves did not pose a problem since recordings could be presented to the subjects, but finding a means for listeners to indicate their choices in a way that would not be influenced by intelligence, schooling, etc., did present difficulties. (Even underlining or circling responses requires knowledge of how to hold and use a pencil.) At the same time, a shortage of researchers to interview the subjects meant that developing some type of individual response that could be gotten rapidly in the field and saved for later analysis was necessary.

The solution to this research problem? Providing the subjects with simple drawings, each of which represented aspects of the themes in the tapes used as stimuli. To respond, the subjects ripped the paper in a prearranged way to indicate a given answer. A pretest of this literacy-free response mode proved it satisfactory, and the production staff believes it can isolate the effects of the variables in question on the intelligibility of the message as presented in the various treatments by computing the "correct" answers as recorded on the "torn" answer sheets.

These two examples of the adaptation of research to local conditions should inspire practitioners of educational technology in developing countries to find ways to design and carry out the research needed to answer their questions. Research must be carried out. it is not a luxury. But it must be appropriate to our needs and resources if it is to be self-sustaining and creative.

■ *Frank Gerace, Cochabamba, Bolivia. This article is adapted from a longer one published in the December 1978 issue of* Educational Technology *(Englewood Cliffs, New Jersey).*

research on broadcasting for rural community development — hypotheses and suggestions

How can radio and television broadcasts promote the goals of community-development efforts in rural areas? What do we know about the importance of institutional support for these broadcasts?

The initiation of *Acción Cultural Popular (ACPO)* in 1947 marked the beginnings of radio broadcasts that have since been used in Latin America, Africa, and Asia as tools of rural community-development programs — of efforts, that is, to increase self-reliance at the grassroots levels and the participation of people in the improvement of their community and in their nation's social and economic advancement.

Typically, broadcasts in community-development programs have had several objectives: basic-skills training (e.g., literacy programs), consciousness-raising, and facilitating dialogues between rural adults and the national government. In Latin America, radio schools have been used to meet each of these objectives, with certain programs focusing more on some and less on others. The *Acción Cultural Popular* model has been used in about 20 radio-based programs to provide skills training, particularly that related to literacy, as well as cultural and religious education, and consciousness raising. *Radio Santa María* in the Dominican Republic has put more stress on literacy and other primary-school subjects. The *Movimento de Educação de Base* in Brazil had a relatively stronger emphasis on motivation for local mobilization. In Africa in the 1960's the governments of Senegal and Niger introduced rural radio programs intended to stimulate a dialogue with the *paysans* through information broadcast from the capital and feedback in the form of written letters and tape recordings. Messages have been sent over radio in the six media campaigns in Tanzania, and over television in the *Télé-pour-tous* program in the Ivory Coast. To small receiving groups in rural areas has been sent information about agriculture, health, nutrition and government policies and practices; this knowledge was expected to lead to improved rural living conditions and hence to increases in human resources.

Thus, we have the beginnings of accumulated experience and, it is hoped, of wisdom. What we need now to support wisdom and experience is research that better establishes the links between the information-delivery role of radio and television and the process of local community development.

Some hypotheses about this relationship that merit further testing are those related to the importance of *institutional support for* culturally-rooted processes such as schooling, religion, and traditional political and economic structures, rather than organizations per se (which may be value-free, short-lived and rationally designed to meet specific goals). In particular, three hypotheses can be gleaned from what has been learned about using media for community development.

I. *Information and education broadcasts to rural areas must have a basis of institutional support.* Studies of the diffusion of innovations show that the adoption of an innovation that is inconsistent with one's values generally requires a concomitant value change. Since institutions have the power to support value changes, isn't their support of messages advocating behavioral changes essential? The institution used most often to support educational broadcasts has been the school, and the relative lack of success of out-of-school educational broadcasts leads us to ask whether that sort of institutional buttress must not exist as a pre-condition. The church, and especially the support of local priests, has also been shown to influence the success of radio schools in Latin America. Similarly, strong political parties in certain socialist countries (like TANU in Tanzania) and traditional community councils in some Asian countries have demonstrably affected the success of educational broadcasts. In general, radio or television-mediated adult-education programs have not succeeded outside the context of institutions, though it has not yet been proven that they couldn't.

II. *A favorable political climate and local mobilization structure must precede the delivery of information and education broadcasts.* In a study of *Acción Cultural Popular Hondureña (ACPH)*, Robert White concludes that increased skills in literacy, health, agriculture, and other such areas appear to be *effects* rather than causes of socioeconomic structural changes. The relative success of the education campaigns in Tanzania seems to be directly associated with the political reforms instituted along with adult-education programs. And unlike schools, churches, and other institutions that serve to preserve traditional wisdom, political mobilization structures can promote radical change.

III. *Intermediate incentives must be offered to individuals to insure that they learn the skills and knowledge taught over radio or television.* Whereas schools and like institutions control the incentives and rewards for students' learning, out-of-school educational courses often lack such incentives altogether. Learners do not come into daily contact with teachers and peers, nor do they typically receive grades and promotions. Nonetheless, some non-institutional incentives do appear to have increased learning, which suggests that schools and other institutions might be bypassed if effective incentives are offered. Where prestige is attached to literacy (as it is in China), where students must pay a fee for a radio course (as they must in the Dominican Republic), where certificates or diplomas are awarded, or where public recognition is given for adopting new practices, active participation in media-based courses is high. Some relatively simple experiments in the use of various intermediate incentives would help us better understand their value in these programs.

These three hypotheses are all variations on the theme of institutional support. Other research areas tangentially related to this theme are the use (and development of alternative models) of feedback loops between broadcast originators and their audiences, and the optimal complementary relationship between formal schooling and out-of-school educational broadcasting.

The present shortage of sure statements about the effective use of radio and television in meeting the goals of community-development programs reflects in part the difficulty of *measuring* the effects of one on the other. However, recent advances in the techniques of community level research (intermediate research) and research that community members themselves help design and implement (participatory research), as well as our increased understanding of the components of development-oriented broadcasting and of local participation in development activities, make productive work in this area easier and more fruitful.

■ *Jeanne Moulton, Institute for Communication Research, Stanford University*

VIDEO BASICS

On contract to UNESCO's Division of Structures, Content, Methods, and Techniques, John Hopkins and Sue Hall of Fantasy Factory Video in London have developed a foundation course in portapak-based video production. Geared to meet the needs of extension workers who use video primarily for documentation and educators who are not directly involved in program production, the course consists of 14 modules designed for use in groups of a dozen or fewer people.

The modules, eight to ten of which will probably be presented to any given group, each last approximately 2.5 hours. Collectively, they cover basic handling skills, electronic and live editing, in-camera production theory, and maintenance. Accompanied by students' and trainers' manuals, the modules can be presented two-a-day during an intensive course or one-a-day if a more leisurely instructional pace is preferred.

Field-testing of this video course is still in progress, and registration will not open until the release date for the revised version has been fixed. But inquiries may be sent to the course developers at Fantasy Factory Video Ltd., 42 Theobalds Road, London WC1X 8NW, England.

A Communicator's Checklist

1 *Communications for Tomorrow: Policy Perspectives for the 1980's* contains essays by 13 prominent Americans detailing economic, legal, technological, and social perspectives on information and communication. Only one essay deals directly with social service applications of media, but the entire volume may interest some *DCR* readers since American domestic deliberations will influence the development of information infrastructures the world over.

William Lucas's essay "Telecommunications Technologies and Services" discusses how American agencies have used (and failed to use) satellites, cable, and broadcast technologies for social services. To those *DCR* readers discouraged by bureaucratic obstacles to effective media use, Lucas offers no consolation — only a reference to the 1,200 pages of regulations and 12,000 pages of guidelines imposed upon would-be U.S. users of communications for social service.

Excessive U.S. federal paperwork is related to one of the major themes of *Communication for Tomorrow:* the difficulty of orchestrating action (and developing consistent government policies) in a pluralistic, democratic, and capitalistic society. The other major theme is the potential of emerging information technologies — awesome, whether or not effective information policies are developed. While these dilemmas of affluence and democracy may seem less than pressing to some, the convergence of telecommunications, broadcasting, and computing in America is bound to affect, if not shape, world politics, economics, and society.

In the opening chapter, Marc Porat recounts his pioneering, if controversial, classification of the United States as the first "information society" (wherein the production of information absorbs more labor and accounts for more of the GNP than does agriculture, industry, or non-information services). In an information society, information policies become crucially important. Contributing to the need for new policies, technological advance is considered the "big wheel" of social change, and ideology the "little wheel."

Walter Baer of the Rand Corporation also engenders excitement and optimism. Exploring the emerging technological tools of mobile radio-telephones, satellites, micro-processors, and fiber optics, Baer argues that costs are continuing to fall as options proliferate.

Subsequent chapters discuss, in a detailed and analytical way, a complicated tangle of regulatory structures, monopolistic and oligopolistic industries, and government inability or unwillingness to develop comprehensive policies. The authors reflect a thorough knowledge of the pitfalls of American policy-making, providing help in imagining the deliberations about rates and rights that many countries conduct behind the closed doors of their Post, Telephone and Telegraph administrations.

Although the dose of cold and complex reality contained in these chapters seems at first a proper antidote to the uncomplicated optimism of the early chapters, editor Glen Robinson fails to reconcile uplifting economic and technology-related prognoses with mixed prospects for policy-making. Surprisingly, a book sponsored and published by the Aspen Institute for Humanistic Studies provides no overarching framework of human values or social objectives. Indeed, the editor declined even to summarize, saying: "To those who are used to the clean crispness of the executive summary, it may strain credibility to claim that the foregoing discussion is itself only a summary of the many issues that are emerging in this field; nonetheless, that is the case."

It is tempting to compare this volume with similar reports (admittedly Government-commissioned and probably more lavishly funded) that have emerged recently from other western countries. In 1971, Canada's "Telecommission" produced *Instant World*, an excellent treatment in layman's language of 40 expert studies probing the particular communication needs of Canada's diverse and widely scattered population. Since then, Australia has produced a similar report, *Telecom 2000*, whose component studies entailed projections of societal needs. West Germany has published *Telecommunications Report*, which also encompassed a large number of detailed studies. Most recently, France produced *The Computerization of Society*, a study stressing attention to social needs over accommodation to industry pressures or technological change. The French report specifically warned of American dominance as a direct threat to French national sovereignty.

Perhaps the world's major technological and economic power is destined to produce reports stressing "power" perspectives, just as smaller western nations are concerned with the societal impact of technologies often pioneered beyond their borders. Third World nations, in the name of national sovereignty, might place even more emphasis on ideology — Porat's "little wheel" of change — as a lever upon the "big wheel" of foreign-directed technological change.

An increasing interdependence demands that nations understand each other's diverging perspectives on information. However, *Communications for Tomorrow* devotes less than 20 pages (of 500) to foreign perspectives. Therefore, readers seeking a representative picture of western approaches should read this volume along with the other western statements. It should also be remembered that such comprehensive studies from "Second" and Third World perspectives are yet to be undertaken.

Communications for Tomorrow: Policy Perspectives for the 1980's can be obtained for U.S. $10.95 from the Aspen Institute, Publishing Program Office, P.O. Box 1652, 360 Bryant Street, Palo Alto, CA 94302, U.S.A.

■ *Jonathan F. Gunter, Academy for Educational Development*

2 Like trickle-down development, "top-down" communication strikes development professionals as a rather ugly thing of the past. In its place, "bottom up" message-sending has been bought and tried with some success. So too, the "lateral transfer of information" ... plain old talk among equals. *Message from the Village* is the transcript of just this sort of talk, the record of casual conversation (albeit through interpreters) between women on subjects uppermost in women's minds.

At the suggestion of Tarzie Vittachi of the United Nations Fund for Population Activities and with UNFPA funds, Perdita Huston roamed the outlands of six developing countries in 1976 and 1977. She was at leave to gather impressions, to discover firsthand how village women perceived their lot, their roles, and their prospects and she wanted to hear what they thought about the men in their lives.

Huston's aim, though not quite secret, was more specific than she could let on. Her particular interest was in assessing impressions that bear on women's attitudes toward family planning, a subject women in some of the countries visited are not apt to broach with their own daughters, much less with a stranger. To further her purpose, she latched on to the only interviewing technique that stands a chance where social scientists fear to tread. Parlor talk, free association ... call it what you will, roundabout discussion was the answer. Huston backed off when the interviewees lapsed into silence or tears and gently returned to related but less painful subjects. In the same spirit, she offered stories and facts (though few of these are included in the edited transcripts) about her own life to housewives whose curiosity, if not mobility, match her own.

What did Huston find? The facts are not especially surprising, but they are *moving*, and this record of suffering endured with survival its only reward may move those among the powerful who are left cold by slogans. After all, the "by and for women" motif notwithstanding, the inside line on village life in Kenya, Egypt, Sudan, Sri Lanka, Mexico, and Tunisia is not that women the world over find in childbearing and social deprivation a common ground. This was known. The "message from the village" is rather that women have done all they possibly can with the slight material and social resources at their disposal. As for the message *to* the village — and a response is in order — the women interviewed seem to know what they want:

education, the understanding and cooperation of menfolk, and more education.

The preoccupation with education, however wild or benighted the expectations that attend it, should be construed by communicators as a two-sided opportunity. Over and over again, Huston heard complaints that broadcast programming was irrelevant and scheduled to interfere with fieldwork and marketing. Too few programs, the women declared, touched on family life, health, women's problems, and local news. Too few were practical. At the same time, the villages in which family planning and female education had a start (those in Sri Lanka the shining examples, of course) owed something to the infiltration of educational media. If the medium and the message are right, the Moslem woman in North Africa or *la catolica mexicana* appears willing at least to brook ideas that are forbidden or uncomfortable to raise with her husband — whose *re*-education is the second, if not the first, most pressing challenge.

Message from the Village (the sequel of *Third World Women Speak Out: Interviews in Six Developing Countries*, which The Overseas Development Council published in 1978) can be obtained for U.S.$3.95 from The Epoch B. Foundation, P.O. Box 1972, Grand Central Station, New York, New York, 10017, U.S.A. ■ *K.C.*

3 Those engaged in technology transfer and those who wonder and worry about their service and possible transgressions will find in Denis Goulet's latest book a powerful vision and some enlightening insights into the controversy surrounding the use of technology to serve human beings. His previous book, *The Cruel Choice*, a masterful analysis of the "ethics of development," was a philosophical journey into the ultimate goals, purposes, and ethics of development. Goulet has the unusual ability to question almost all tenable conclusions and conventional wisdom concerning development. Possibly, one's conclusions will differ from his, but the agony and effort spent understanding his analysis are rewarded.

In *The Uncertain Promise*, Goulet again asks some difficult questions: Will technology deliver on its promise to bring development to the Third World? Is modern technology the key to successul development? Can technology be transferred from one cultural setting to another in ways that are more beneficial than destructive? The answer to these questions, as the book's title suggests, is that technology offers an uncertain promise. Goulet concludes, paradoxically, that technology is needed to alleviate both the miseries of underdevelopment and the ills of overdevelopment. Yet, technology must be used cautiously and wisely to serve these noble purposes, as it is a two-edged sword, simultaneously a bearer and destroyer of values. While rejecting technology as a panacea for the ills of underdevelopment, Goulet concludes that societies shouldn't make romantic flights from technology. It is imperative to remember, he urges, that the central focus of development is people, and that people can manage technology so it is "beneficial." According to Goulet, the issue is to obtain and use technology to serve genuine human needs by creating a "vital nexus" that links societies' value options with its development strategies.

The Uncertain Promise draws on various recent field surveys made in Latin America, as well as on some scholarly research. Equally important, Goulet reviews historical and philosophical works and reassesses them in light of the important questions he addresses. And he weaves them together in a colorful well-thought out tapestry.

The Uncertain Promise: Value Conflicts in Technology Transfer can be obtained for U.S $5.95 from the Overseas Development Council, 1717 Massachusetts Avenue, N.W., Washington, D.C. 20037

■ *Donald A. Swanson, A.E.D.*

4 "Seeking the Barefoot Technologist" is misnamed in honor of a fine idea (Michael Young's) that is only touched upon in IEC's 13th broadsheet on distance learning. And the wisdom of leaving decidedly personal commentary unsigned is questionable.

In the name of balance, remember these percussive remarks, for fault-finding is finished. Indeed, evidence and insight combine so intelligently in this essay that it can scarcely be introduced without being recommended.

What Ms. or Mr. X has given us is, pardon the apparent contradiction, a forward-looking retrospective on distance-learning techniques applied in rural development projects — the subject of the Dartington conference of which Broadsheet No. 13 is the living record. In fifty pages a case is made for distance teaching's growing importance, the issues (chief among them, the trade-off between quantity and quality and the irrelevance of evaluation-cum-autopsy) are enunciated with understanding and some grace, and five case studies (Dominica, Jamaica, Lesotho, Mozambique, Tanzania) are summarized. These studies, tackling which provided the inspiration for deeming the conference a "workshop," stand out among their kind in that the "case students" neither hold forth on the wider implications of the projects until the local implications become reasonably clear nor, at the other extreme, get weak-kneed when the time for generalization is ripe.

"Seeking the Barefoot Technologist" could be called a primer, for reading it profitably requires no prior knowledge. But that term might put off (as the title may well put off) the more footsore in the profession, for whom a blend of common sense, reflection, and practical suggestions may come as a second wind.

"Seeking the Barefoot Technologist" can be obtained from Int. Extension College, 131 Hills Road, Cambridge CB2 1PD, England for U.S. $5 or £ 2. ■ *K.C.*

5 Feeling a need for a comprehensive review of the work being done in adult and nonformal education in Latin America, the International Council for Adult Education in Ottawa, Canada, began in 1975 to collect the necessary data on professionals and institutions dealing with this educational focus. Aimed at providing a base on which to build professional associations, the product of their review is *Educación de Adultos en America Latina*.

The publication treats in computer print-out format the institutions and programs for training in adult and nonformal education in 20 American countries, includes the professional profiles of approximately 415 people in the field, and lists related publications produced in 16 of the countries. To enable others to help it improve and expand its effort, the Council included in its publication a questionnaire and forms that readers omitted from the roster can complete and return to assure their inclusion (and their institution's) in the Council's network file.

Educators throughout the world are sorely in need of channels to use to keep abreast of experimentation and innovation — that which succeeds and that which fails — by their peers. Unfortunately, nothing is as satisfactory and informative as person-to-person contact. The next best thing, however, is to know where to turn to initiate at least a correspondence that might provide some needed answers. This book should help readers find out where to turn.

Copies of this directory, *Educación de Adultos en America Latina* can be obtained in Spanish from the Consejo Internacional para la Educación de Adultos, Oficina Regional, Apdo. 682, San José, Costa Rica for U.S. $6.00. ■ *J.B.*

6 *The Video Distribution Handbook* by Sue Hall and John Hopkins provides some interesting information to practitioners of the video art, particularly to those who wish to put on video shows. It does *not* contain much production information. Definitely for people who already have a video product and are trying to learn how to show it to large groups of people at one time, the handbook treats the video vocabulary thoroughly and with a slight English accent.

Clear diagrams help the reader understand playback systems for video shows. Several methods of video presentation are covered, including combinations of multiple recorders, single recorders, multiple monitors, and video images to be magnified onto large screens.

The last 30 pages of the book are devoted to listing distributors of videotape equipment. Since all are located in England and Wales, we outside of Great Britain may find the list of little use.

The Video Distribution Handbook is available from the Fantasy Factory Video Ltd., 42 Theobalds Road, London, WC1X8NW, England, for £ 2 (checks on British banks the only acceptable currency besides U.N. coupons). ■ *W. S.*

A Training Strategy for Women-to-Women Development and Communication Networks

In the modern industrial world urban transportation and telecommunications have virtually ended women's social and political isolation. But the problem persists in most agrarian societies, where the only information and communication *network* to which most Third World women have direct access is face-to-face communication with other women.

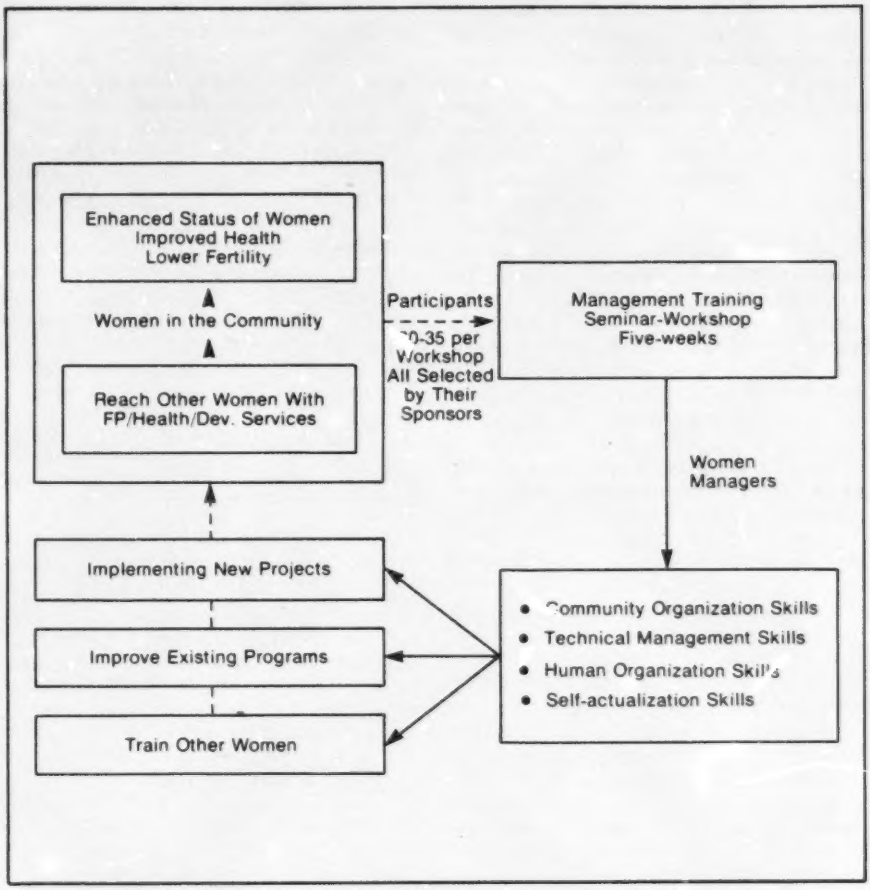
A serious consequence of home-bound isolation for Third World women is the benign neglect of their needs by policy-makers and development planners. While development programs aim to provide health, welfare, and other services to women, socioeconomic and cultural constraints within the delivery system and society militate against the success of such services. This failure is not necessarily a matter of poor resources. It reflects instead the view of policy-makers that women are not partners in development, but merely passive recipients or targets of socioeconomic policies. Indeed, if women are to benefit and participate more fully in the development process, they need training to initiate and implement community-based programs, and they require access to more innovative delivery and communication systems.

In most traditional societies women mingle with other women quite freely, sharing common problems and articulating similar needs. This communication network may be rudimentary and ill-formed, but it can be tapped and merged into a more effective women-to-women delivery system. Examples of such innovative delivery systems are few in number, but important. The most recent, in Bangladesh, has demonstrated the potential of a "women to women" approach. The Concerned Women for Family Planning Project (CWFP) has enrolled increasing numbers of women as participants in a program that reaches into urban slum dwellings through a cadre of trained women field-workers, supervisors, and managers.

One key to the success of CWFP is local women's involvement in program development so that programs meet local priority needs. Another is the provision of on-the-job training for field staff and of management training for the project director and the clinic director, both of whom participated in management training seminar-workshops conducted in Washington by the Centre for Population Activities, a non-profit training institute.

The first seminar-workshop for women on "Planning and Management of Service Delivery Programs in Family Planning, Health, and Development" was organized by CEFPA and funded by A.I.D., UNFDA, the Pathfinder Fund, and other agencies specifically to train women in management skills that few Third World women have had the opportunity to acquire.

The objective of the strategy shown here in a diagram is to improve the participants' own technical and interpersonal skills and to encourage participants to train other women in their communities to plan and implement action programs (for instance, a Women's Resource Center as in Pakistan or community-based health and family-planning services). At seminars, the technical and community-organization skills needed to determine the priority needs of local women are stressed. Participants are also involved in community action programs, trained to deliver social services, given technical knowledge and an understanding of family planning, health, and development commodities, and shown how to use feedback to improve the quality and acceptability of services.



The media techniques used in the seminars vary from the presentation of simple case studies and role-play exercises to the use of special training films, slides, and video cassettes. The participants are encouraged to use newsprint and given practice in making more professional presentations. New insights into communications are introduced through verbal and non-verbal structured experiences and through communication games involving the use of tinker toys, wall charts, and other simple tools.

Thirty-six women from 23 countries attended the first seminar-workshop. The backgrounds of the participants were diverse, but every woman was actively involved in programs benefitting women. One-third represented government agencies, and two-thirds were affiliated with women's organizations. About 50 percent of the women came from the health and family-planning field, and the rest worked in integrated women's development programs.

Two Thai participants interviewed by the Voice of America said that experience gained during the seminar-workshop was sufficient to enable them to go back and work as managers "to start a program which might be about anything — family planning, community development, social or economic development, anything that would improve women's lives in rural areas." Indeed, CEFPA expects that in the near future the participants will form the core of an expanding support and communications network both in their communities and internationally through Technical Cooperation among Women's Programs (TCWP), although further development of the communication network will require systematic post-training follow-up and follow-through.

For more details about CEFPA's women's training programs, write Kaval Gulhati or Peggy Curlin, The Center for Population Activities, Suite 202, 1717 Massachusetts Avenue Northwest, Washington, D.C. 20036, U.S.A.

■ *Kaval Gulhati*

"Different but Equal"

"Different but Equal" (*Diferentes pero Iguales*) began in June of 1977 under the auspices of the Division of Social Communication of Women in Development, Inc., in the Dominican Republic. The half-hour program is aired weekly and nationally through the official government station, Radio Television Dominicana, and forms part of a proposed low-cost training program for talented Dominican women of limited opportunities. The long-range objective is to organize a team of technically proficient women capable of producing educational programming in TV and radio, with an emphasis on development topics.

One of the conclusions of a survey of opinions on women and the media conducted during a conference sponsored by the Interamerican Women's Commission in 1977 and attended by Dominican experts in communications was that "woman's distorted image as projected through the Dominican media tends to isolate and restrict her from tasks that in cooperation with men, could contribute to a more balanced society." In part, this distortion reflects the lack of well-trained female technicians in the Dominican Republic. No female holds a significant directorial or technical position in the 115 active radio-TV stations in the country. What's more, the few women involved in communications depend exclusively on male technicians to record, edit, and produce programs. Under such circumstances, women's creativity and expression are severely restricted.

The survey verified that most radio-TV programming does not help women reorient and improve their lives. On the contrary, it cultivates questionable values and offers simplistic answers to real-life problems. Naturally, this type of programming helps perpetuate female stereotypes, projecting women as sexual objects and as passive and emotionally unstable beings. What a far cry this sort of programming is from what Dominican women need: information on educational opportunities, on malnutrition, on breastfeeding, on gastrointestinal diseases due to polluted water, etcetera.

As the participants in the Seminar on Women and the Media concluded, inappropriate and banal programming reflects the fact that the media are controlled by economically stable men, many of whom are indifferent to women's needs and paternalistic and mocking in their attitudes toward women's social, professional, and family roles. In short, a change in programming and management was long overdue.

"Different but Equal," a channel through which women are reaching the public with their own message, and not somebody else's version of it, is the beginning of that change. Fifty-four public service programs — including those on women artisans, vendors, and professionals — have been produced so far. Three groups of artisans are using the program to promote their art, and numerous organizations such as public health agencies, drug rehabilitation institutions, juvenile authorities, and unions of ex-prisoners are asking for airtime.

"Different but Equal" depends for support on donations since manufacturers of rum, cigarettes, and expensive cosmetics are not sought as sponsors. Last year it received a $5,000 grant from a state wheat enterprise. This year it has received $2,500. Airtime is donated by Radio-Television Dominicana.

Although "Different but Equal" is fairly new on Dominican television, it was chosen in 1977 from among 21 programs (each produced by or directed to Dominican women) as one of two programs that advances the image of women as mature, independent citizens. In a short time, it has gone a long way toward furthering sexual equality.

■ *Sonia Andujar, Producer,* Diferentes pero Iguales, *Santo Domingo, D.R.*

FILMS MADE IN LDCs

The Third-World Moving Images Project — under the direction of Harold Weaver — studies, documents, exhibits, and helps preserve filmed images of Third-World peoples. A small staff with experience in teaching and film-making has created a variety of lecture, viewing, and discussion sessions, as well as for-credit and adult-education courses, all of which it offers to North American colleges, museums, film societies, libraries, and other organizations for a negotiable fee.

The broad concern of the Third-World Moving Images Project is cinema and society. Representative of the Project's programs are those on general Third-World cinema, African film, and Afro-Americans in cinema. Typical of its projects other than conducting showings are organizing workshops and film retrospectives, compiling annotated bibliographies and filmographies, and consulting.

The Project has collaborated with institutions in Europe, Africa, and the Caribbean; and its director invites inquiries and information from developing and developed countries alike. Write Harold Weaver, Third-World Moving Images Project, P.O. Box 119, Amherst, Massachusetts 01002, U.S.A.

Development Communication Report, published quarterly by the Clearinghouse on Development Communication, is distributed free to over 6000 development professionals.

A center for materials and information on important applications of communication technology to development problems, the Clearinghouse is operated by the Academy for Educational Development, a nonprofit planning organization, and supported by the Technical Assistance Bureau of the U.S. Agency for International Development as part of its program in educational technology and development communication.

The views expressed in *Development Communication Report* are those of the authors and not necessarily those of its sponsors. Original material in the *Report* may be reproduced without prior permission provided that full credit is given and that two copies of the reprint are sent to the editor.

Readers are invited to submit typed manuscripts of no more than 1000 words and to send in photographs.

A "DISCOVERIES" CONFERENCE ON COMMUNICATIONS

The third international DISCOVERIES conference, entitled "Communication in Human Action," was held in Paris from October 23-27, 1978. Supported by the Honda Foundation, this conference brought together both physical and social scientists from fourteen countries to exchange views on current developments in human communications and to speculate upon future trends.

The DISCOVERIES conference grew out of a three-day symposium held in Tokyo during October of 1976 that gave scientists and thinkers of all nations a chance to meet to discuss vital global questions. An acronym for "Definition and Identification Studies on Conveyence of Values, Effects and Risks on Environmental Synthesis," DISCOVERIES may be roughly understood to mean "discovering what is essential to man's activity in his total environment." A second conference was held in Rome during November in 1977 to gauge the "megacrisis" of population, food, and energy confronting humankind, and a fourth is planned for Stockholm in August of 1979, after which the Honda Foundation expects to entertain proposals for concrete action.

Although much attention in the Paris conference was focused upon the "post-industrial" or "information" societies currently emerging in the industrially advanced countries, the problems of information technology transfer to developing countries were not ignored. At a special session on "Cultural Problems of Technology Transfer" (chaired by Professor Z. Damjanovic, Director of the Center for Multidisciplinary Studies at the University of Belgrade), all participants agreed that latent social effects must be given careful consideration and that the transfer of communication technology should in fact be viewed as the transfer of culture. Professor Donald Ekong, first Vice-Chancellor of the University of Port Harcourt in Nigeria, emphasized the fundamental importance of developing indigenous technical talent and ingenuity; and Professor R. Narasimhan, Director of the Tata Institute of Fundamental Research in Bombay, stressed that technology transfer is most effective between "perceived equals." A.I.D.-supported projects for introducing both two-way and regional educational radio communications in support of rural health programs were described by Ned Wallace of the University of Wisconsin's Center for Appropriate Technologies for Health.

Further information may be requested from Honda Foundation Headquarters, 6-20, 2-chome, Yaesu, Chuo-ku, Tokyo 104, Japan.

■ *Alwyn Scott, Department of Electrical and Computer Engineering, University of Wisconsin at Madison*

COMMENTS ON READERS' COMMENTS

If the 611 respondents to the *DCR* survey enclosed in issue 22 are typical of their fellow subscribers, *DCR* readers are united in spirit and divided on issues. The overwhelming majority find the report of use, even instrumental, and a fair number claim no other publication covers the same territory with an eye to the same considerations. The borders of that territory defy definition by reader consensus, but responses and comments fell into patterns strong enough to give editorial direction.

Preferences for References

The typical *DCR* reader apparently uses the newsletter as a research tool. The request voiced most often was for expanded references. Some readers want *DCR* to carry bibliographies on the theme of each newsletter. Others want a list of references to follow each major article. A greater number simply expressed appreciation for book reviews, references to research and publications from which feature articles are drawn, and the like. Along these same lines, a common request was for publication of an annual index of articles.

Hard Data & Wisdom

The typical *DCR* reader apparently holds opinion in low repute. A helping of opprobrium was heaped upon soft data (called "description," "ephemera," and "over-the shoulder analysis, " among other things). Ironically, however, articles cited by some readers as examples of unscientific thinking were held up by others as models of informed analysis. Complicating matters, some readers made the point that reflective observation is both preferable and in opposition to the straightforward presentation of facts, while others said that the full picture can only emerge from a juxtaposition of the two. (To a few the question is one of style, of academic writing versus journalism.)

But if readers disagree on the distinction between hard and soft data and that between opinion and wisdom, they are in accord as to the relative value of particulars and generalities. Praise of articles on broad subjects came primarily in conjunction with the expression of the need for an overview as a means of making sense out of case studies, while many readers want more case studies and more coverage of exemplary projects.

Grapevine

The typical *DCR* reader wants to be part of an active network. Common calls were for news of career and scholarship opportunities, training courses and seminars, and communication activities at the regional level. Numerous readers welcome the means to contact *DCR* contributors on their own, to contribute the findings of their research, and to write directly for research materials. Others seized the chance to add their colleagues' names to the subscription list. A few, teachers and librarians in particular, asked for extra copies of *DCR* to hand out to students and co-workers.

Presentation

Predictably, the typical *DCR* reader pays careful heed to matters of style and format. The overwhelming majority of those who addressed themselves to the subject favored the continued use of educated but direct English and voiced support for attempts to rid prose of jargon (though a few felt that even more effort should be put into this purge). A few readers lamented the fact that *DCR* is not fully comprehensible to those whose command of English is shaky and to those who are not highly educated, but just as many warned against "trying to become all things to all people" and blurring the editorial focus as a result.

Many readers find *DCR's* print-packed format somewhat forbidding and recommended various remedies for the effect: unjustified margins, new type faces, etc. However, these comments tended to contradict one of the findings of the tabulated part of the survey: that most *DCR* readers want no format changes. Moreover, many readers cited the shortage of information on development communication as a sort of moral argument for retaining the present format, however congested it might seem to the architectural eye. More specifically, some readers suggested including a table of contents, and many recommended featuring somewhat more and somewhat shorter articles in each issue.

Two Clienteles?

The typical *DCR* reader seems to place professional identity before ethnic or national identity. The strong presumption behind readers' comments was that communicators in one part of the world stand to learn plenty from the experience of those in the opposite hemisphere. But some differences between respondents inside the U.S. and those outside the U.S. (the majority by a small margin) did show up. U.S. subscribers, for example, appear somewhat less willing as readers to transfer findings across sectors; conversely, their requests for information and articles tended to be more specific. They also showed more interest in costs and cost-effectiveness than did their counterparts.

LDC and other non-U.S. readers were more likely to append written comments to the survey forms. Naturally, they were also more likely to ask for the publication of *DCR* in languages other than English

DEVELOPMENT COMMUNICATION REPORT (DCR)
Reader Survey Results*

- Does your work involve problems specific to a sector (agriculture, health, education) or general functions in education and communications that transfer across sectors?
  (140) education (222)
  (40) agriculture (101)
  (45) nutrition (61)
  (39) population (43)
  (63) health (69)
  (149) cross-sectoral emphasis (147)
- How do you spend most of your work time?
  (81) policy-making (144)
  (135) project planning (231)
  (128) project administration (189)
  (39) supervising field-workers (120)
  (164) evaluation/research (210)
  (79) message design/production (159)
- How do you read *DCR*?
  (72) In depth (137)
  (148) Selectively (211)
  (22) File for later use (35)
- Do you share the publication with your colleagues or students?
  (111) Often (192)
  (113) Sometimes (121)
  (13) Never (9)
- How have you used information from *DCR*?
  (158) in informal discussions with colleagues (120)
  (60) in formal meetings (76)
  (78) in class with your students (109)
  (194) as a source of information leads (258)
  (70) in project design/evaluation (122)
  (38) as reprint material (63)
- How would you rate the overall utility of *DCR*?
  (158) Very Useful (240)
  (114) Somewhat useful (124)
  (4) Useless (10)
- Do you read feature articles in *DCR* that deal with development sectors other than the one in which you work?
  (49) Always (83)
  (130) Often (176)
  (60) Sometimes (106)
  (2) Never (5)
- Would you like to see more pictures and graphics in *DCR*, or would you prefer as much text as possible?
  (43) More pictures (73)
  (81) As much text as possible (107)
  (106) Leave *DCR* as is (145)

HOW DO YOU RATE THE FOLLOWING TYPES OF INFORMATION?

- On major issues
  (171) Very useful (216)
  (100) Somewhat useful (122)
  (1) Useless (1)
- On applications in specific sectors
  (149) Very useful (214)
  (97) Somewhat useful (124)
  (2) Useless (3)
- On specific communication methods and techniques
  (128) Very useful (209)
  (102) Somewhat useful (126)
  (2) Useless (2)

*U.S. responses to the left of item, non-U.S. responses to the right. **TOTAL: 611 as of 12/1/78**

(especially Spanish). Finally, as a group, they tend to set greater store by "how-to-do-it" articles than U.S. readers do, probably because their access to such is restricted.

Conundrums

Some readers asked for what cannot be given, others for what has already been published. In the first case, quite a few readers identified their own "biases" before asking for highly specific articles slightly outside the compass of *DCR* (on management techniques for running industries that employ fewer than 50 people, for example). In the second, respondents were sent back issues that met their needs.

A perplexing number of readers asked for articles on educational technologies. Apparently, something other than the media in service of development was meant, but just what was not spelled out. (Perhaps an article on the nomenclature of educational technology and development communication is in order.)

Roughly equal numbers of readers asked for analytical descriptions of and cost information on technologies and for exposés of the problems associated with technology transfer. (Side-by-side presentation may solve this poser.)

New Directions

A handful of readers remarked that they appreciated the "evolution" of *DCR*. Those who returned the survey will find their own imprint on that process. A miniaturized table-of-contents has already been added, as has more bibliographic material. "Calls for Copy" will contain readers' requests, and the weightier and more controversial suggestions will be tried out one at a time.

To the reader who said of *DCR* "We like it, we use it, we share it" goes the last word on the survey: "We withhold opinion on it, we use it, we share it." ■ *K.C.*

MESSAGE DESIGN

Stanford University's Institute for Communication Research will conduct a workshop on the design of development communication messages from August 14 to September 1 of this year. Intended for Third World educators, extension agents, broadcasters, film-makers, graphic artists, and media researchers working in all development sectors, the three-week course will cover development communication theory, learning theory, the art of persuasion, and message-evaluation techniques. Coursework will revolve around lectures, role-playing sessions, and the analysis of case studies.

Applicants must bear the full costs of tuition, travel, and accommodations and must include the following information on their applications: name, address, age, academic record, professional record, and a rationale for inclusion in the workshop. Applications (due April 1) and further inquiries should be addressed to Bella Mody, Institute for Communication Research, Cypress Hall, Stanford University, Stanford, CA 94305, U.S.A.

THE NFE INFORMATION CENTER

The NFE Information Center seeks to put people in touch with resources and to acquaint them with ideas related to nonformal education for development. Begun in 1974 and funded by the Agency for International Development, the Center serves a network that now embraces 3,600 persons in 126 countries.

Besides responding to about 75 requests weekly, the Information Center's staff produces a quarterly newsletter, the *NFE Exchange*. Each issue is topically-oriented — e.g., front-line development workers, skills-training programs for adults, mobilizing youth for development, NFE and entertainment, women in development — and each contains highlights of projects around the world plus an annotated bibliography. The Center also makes available, on an exchange basis, more than 20 publications on nonformal education prepared by study teams at Michigan State University.

To receive more information or to request a subscription to *NFE Exchange*, write to Joan M. Claffey, Director, NFE Information Center, Institute for International Studies, College of Education, Michigan State University, East Lansing, Michigan 48824, U.S.A.

TV JOURNALISM FELLOWSHIPS

VISNEWS, the world's largest television news agency, set up in 1978 an educational trust fund to commemorate its 20th anniversary of service. Money from this trust will be used to enable three or four TV journalists per year to spend three months abroad studying techniques for gathering and presenting TV news.

Fellows will be selected by an independent board of trustees directed by Jean d'Arcy, President of the International Institute of Communications, from those countries with national or regional television systems. Journalists from the U.S.S.R., the U.S.A., Canada, South Africa, Japan, Australia, and New Zealand are ineligible, however.

Winners of the competition will visit organizations and studios in London, New York, Philadelphia, Toronto, Edmonton, Wiesbaden, and Geneva. They will become acquainted with various methods of handling news material and compare several broadcasting systems. They will exchange ideas with colleagues and write reports on the implications for their native countries of the growth of electronic journalism.

Fellows for 1979 have already been selected, but applications for the 1980 competition, as well as requests for additional information, can be addressed to Secretary to the Trustees, VISNEWS Ltd., Cumberland Avenue, London NW10 7EH, England.

EDUCATED CHOICES/ A GUIDE

The Development Support Bureau of the Agency for International Development has made available to *DCR* readers a limited number of copies of *Instructional Technology in Developing Countries: Decision-Making Processes in Education* (1976) by Stuart Wells. Please contact the Clearinghouse if you are interested in obtaining a copy.

ARE YOU LISTENING?

Martha Stuart Communications, Inc., a New York-based video production company, embodies well-articulated minority views on the media's place in development. The video artists who make up Ms. Stuart's band produce and teach others how to produce broadcast-quality programming, most of it shot in improvised or borrowed studios. Rather more mainstream than their approach, their philosophy centers on making informed choice possible and their strategy involves the extension and multiplication of the opportunity to know and to do.

The group's method is to allow ordinary people a public or semi-public say (the choice is often theirs) on concerns that directly affect their lives — family planning, sex roles, work conditions, childbearing, etc. — as a means of legitimizing the issues and of arousing peer support. Through hands-on training in video technique and equipment use, the videographers also share "the means of production" with local counterparts, who then carry on the interactive process.

Ms. Stuart is best-known for her U.S. series "Are You Listening?" The series consists of tapes of frank talks — led with spirited candor by Ms. Stuart, whose strong but welcome presence in her videotapes represents another departure from the going wisdom on videography — with American subgroups about what it is like to belong to the groups. In other words, Stuart asks black teenagers about being a black teenager, domestics about life as a domestic, and women who have had abortions about having an abortion.

Internationally, Stuart's group has worked in conjunction with family-planning efforts in Colombia, Ethiopia, Jamaica, and elsewhere. It has also conducted training workshops for workers in agriculture, health, and literacy.

Further information about Martha Stuart Communications can be obtained from Dorinda Hoarty, 66 Bank Street, New York, N.Y. 10014, U.S.A.

CALL FOR COPY

DCR's editor invites readers to submit manuscripts on the use of computer technology in communication and education in developing countries, software development, skills-training activities involving use of the communication media, learning games, innovative literacy efforts, and health-information campaigns.

PROJECTS IN BRIEF

BAI — ON THE AIR

Rebekah Mae Qualls
c/o Bureau of Animal Industry
Region I
Dagupan City, Philippines

Date submitted to CDC: October 28, 1977

FOCUS: This weekend radio program has a twofold objective: to educate livestock raisers about projects of the Philippines Bureau of Animal Industry and the government benefits available to them, and to teach farmers how to raise larger and healthier stock. Free literature about topics such as vaccination programs and animal nutrition is offered on each show. The program, which is now broadcast in English, needs someone to repeat the radio message in local dialects.

SUBJECT AREAS: Agriculture, Nutrition

TYPE OF MEDIA: Radio, pamphlets

TARGET AUDIENCE: Literate and illiterate adults and youth, both rural and urban

SCALE OF PROJECT: Regional

PROJECT STATUS: Begun in 1977; in implementation stage as of 10/77

SPONSORING/COOP. AGENCY: Bureau of Animal Industry; Department of Public Information (DPI Radio)

POPULAR THEATER EDUCATION

Ross Kidd
Botswana Extension College
Private Bag 004
Gaborone, Botswana

Date submitted to CDC: May 29, 1977

FOCUS: The purpose of this project is to get extension workers in agriculture, community development, and health education to use popular theater as part of their extension work and as the basis for integrated campaigns on specific development subjects. Such use of popular theater has proved an excellent technique for overcoming the literacy barrier and for attracting the interest of participants in becoming actors and planners.

SUBJECT AREAS: Agriculture, Health, Nutrition, Population/Family Planning, Community Development, Nonformal Education

TYPE OF MEDIA: VTR, pamphlets, posters; plus drama, puppetry, dance, and poetry

TARGET AUDIENCE: Illiterate rural adults

SCALE OF PROJECT: National

PROJECT STATUS: Begun in 1974; in implementation stage as of 5/77

SPONSORING /COOP. AGENCY: Botswana Extension College and the Ministries of Health, Agriculture, and Education

CAPACITACIÓN LABORAL URBANA — ADULT EDUCATIONAL-VOCATIONAL PROJECT

(Susan) Lynn Johnson
Peace Corps
c/o U.S. Embassy San Salvador
El Salvador, Central America

Date submitted to CDC: June 30, 1977

FOCUS: This vocational-educational program for adults focuses on six occupational areas: tailoring, sewing, radio and TV repair, cosmetology, cooking, and auto mechanics. A video portapak unit was used to help train teachers, develop course curricula, teach interview techniques, aid in job orientation and counseling, and provide communication between the Ministry of Education and the vocational classes. Project personnel hope to expand the use of the portapak system, especially to rural areas where educational television has not been very successful. The project advisor welcomes information about the use of video portapak units in developing countries.

SUBJECT AREAS: Education, Industry

TYPE OF MEDIA: Cassette recorder, reel-to-reel recorder, VTR, television, pamphlets, posters

TYPE OF AUDIENCE: Literate and illiterate adults, both rural and urban

SCALE OF PROJECT: Regional — 4,000 persons

PROJECT STATUS: Project to run from March 1976 to March 1978; in implementation stage as of 6/77

SPONSORING/COOP. AGENCY: AID; Ministry of Education, El Salvador

ABONO YOUTH SELF-RELIANT DEVELOPMENT

Tsala Minkengue
I.P.A.R.
Box 4135
Yaounde, Cameroon

Date submitted to CDC: September 20, 1977

FOCUS: Members of this youth cooperative are interested in improving the agricultural methods of farmers in their region through the introduction of fertilizers and the extension of pig and chicken farming. An attempt in 1974 failed because of lack of adult support. Members of the cooperative are seeking ways to use communication media — radio, cassette recorders, and print — to put an effective and convincing project together. They need funding.

SUBJECT AREAS: Agriculture, Health, Nutrition, Community Development, Education, Marketing/Coop.

TYPE OF MEDIA: Cassette recorders, radio, filmstrips, newspapers, books, pamphlets, posters, billboards

TARGET AUDIENCE: Illiterate rural adults

SCALE OF PROJECT: 12 villages

PROJECT STATUS: Youth now working with the community, but need funding to continue project

SPONSORING/COOP. AGENCY: None

These project descriptions were written by Barbara O'Grady of the Academy for Educational Development using information submitted by readers in response to the Project Information Request in Issue 18 of DCR. *Future newsletters will contain four project descriptions an issue until the series is completed. The full series is available from the Clearinghouse upon request.*

Toward The Definition Of Broadcasting Training Needs — Some Tentative Answers

Part I of this article, "Toward The Definition Of Broadcasting Needs — Some Systematic Questions," appeared in DCR *issue 24. Both parts are adapted from Chapter 5 of* Training for Broadcasting in Asia *(AMIC, 1977) and reprinted with the permission of the Asian Mass Communication Research and Information Centre in Singapore.*

II. The Crucial Problems

1. What if entry-level trainees turn out to be unsuitable or drop out of the system?

Selection procedures need to be improved. Pressures for appointments based on political connections or personal friendships can be resisted only if selection criteria are objective. Although particular screening devices need to be validated by checking the subsequent success of the candidate, the usual "paper credentials" based on school examinations or degrees can be supplemented by tests of knowledge and aptitudes relevant to the position under consideration. To screen potential programmers, use tests of awareness of current issues, language skills, and reading comprehension, and require a writing sample under controlled conditions. Nothing substitutes for a rigorous interview conducted by several persons in which the candidate is required to deal verbally with the kind of problems confronted on the job.

2. How can we keep trained staff from moving out of broadcasting into other jobs?

Low salary scales in broadcasting are, of course, a basic problem. Continued stress on professionalism and the important role of the broadcaster in social development should improve this in time. But, for now, the motivation of the staff is of major importance. "No room to be creative" is one of the most frequently heard complaints. Encouraging experiments, recognizing creativity and inviting staff participation may help curb boredom. So might the interchange of radio staff and television staff at the same wage levels.

3. What if the staff does not seem to profit much by visits from out-of-country specialists coming in to conduct training workshops?

Perhaps the workshop should not be conducted in English. Even though the trainees are nominally able to use the language, the strain of listening, especially if there are dialectic and idiomatic differences, can kill interest. Also, the trainer should avoid making false assumptions about the background of the audience, and should take care not to speak either above or below the appropriate information level. Further, all available staff members should not be placed in a single training session; their backgrounds, interests, and needs are so diverse that a trainer cannot possibly produce anything meaningful to the entire group. Last, irregular attendance at workshop sessions reflects the pressure of taxing work schedules or social interests and suggests that training should be conducted outside the normal work environment.

4. What if our people come back from overseas training and complain that we don't have proper equipment?

Special care must be taken to motivate trainees to apply the acquired skills to less sophisticated technologies. Stress on the effectiveness of the end product and on the element of individual creativity may remove some of the emphasis on specific equipment. In-country training with existing technology should have highest priority and more sophisticated training in-country or abroad should be synchronized with the development of the local technology.

5. Where can we get qualified trainers?

Of course, trainers can be imported from either developed or develping countries. But trainers from abroad are not qualified to conduct training if they just superimpose their expertise on local conditions and systems. Instead, they have to adjust (reduce, change, augment) their expertise so it can be absorbed and used in the national systems. Trainers have to be able to analyze and recognize what by their own standards are local shortfalls. They must adapt to local work rhythms, ways of thinking, authority hierarchies, and mores.

6. How can we avoid wasting training opportunities on people who are assigned to jobs that do not require use of their new skills?

a. Care in the selection of the training institution and program will help insure relevance and thereby increase the chance that the training will be used.

b. The broadcaster must evaluate the talent of trainees carefully before sending them for training. Both the training investment and the potential trainee's psychological welfare are at stake in this matter.

c. "The Peter Principle" should be considered. The trained individual who is sometimes promoted out of his area of competence should be returned to the job for which he was trained.

d. Management should be "trained" for precise tasks.

e. The civil service system should be modified so policies, job descriptions, pay scales, etc., that prevent effective utilization of trained personnel are eliminated.

f. Trainees sent for special training should have built into their contracts a mandatory period of well-defined service.

g. If training can be made specific for various levels of expertise, the trainee is more likely to be placed where the training will be most used.

7. How can we involve the broadcaster in face-to-face confrontation with his audience so that he becomes vividly aware of its needs and interests?

a. The broadcaster's job should include mandatory field visits to villages or metropolitan areas outside his normal ambit.

b. Alternatively, he should be allowed "X" days per year to travel (expenses provided) to visit his audience.

c. Extension workers both coming and outgoing should be used to bridge the gap between the studio and the field.

d. Villagers can be recruited and used as broadcasters.

e. If there is a system of rural listeners' clubs, the broadcaster should visit them to establish personal contacts.

f. Listener clubs can be stimulated by programming that features names, birthdays, etc., and studio "parties" can be arranged for events of local importance.

g. Field production of programming is perhaps the basic answer; program production should be taken out of the studios to where the people are.

h. Decentralized production — regional production of programs that are then fed into the national network — can be done at low cost with new transmission facilities if the system is so designed from the beginning. ■

Dilemmas (Continued)

landowner was not influential among most of the people but merely represented one of several factions. By taking his advice and occupying his building we had, to all appearances, become his clinic. Moreover, the nurse we appointed was from a different language and culture area, and she was never able to become a part of the community. Then too, despite initial cooperation with the government, we found ourselves duplicating government efforts.

In the first instance we failed to provide for follow-up service and care, which we could have done by training a concerned local person to provide the necessary continuity between clinic visits. And, indeed, we knew just such a person in this particular village. The intelligent young daughter of the librarian had helped us in many ways, and we should have made her part of our team. We could have had a continuing presence in this village. In turn, she could have checked up on the condition of the patients we saw at the clinic, advised them about what to do if they were not getting well, and notified us of serious problems.

In the second, we allowed the persuasiveness of an influential but unpopular landowner and the appeal of convenient physical facilities to deflect us from our original purpose of providing health care to the poor and those who had no access to other medical services. To reiterate, we made a simple but consequential mistake when we failed to enlist the continuing help of a local person. ■

Dilemmas in Country X: Candid discussions about failures

The following Dilemma, *contributed by Dr. Ronald S. Seaton of the Mission Hospital in Maharashtra, India, is not specifically concerned with the communication media or nonformal education. But it does focus on a problem that communicators and nonformal educators share with workers in every sector of development, the failure to engage local people in liaison and support work. For that reason and for the sake of those attempting to enlarge the concept of development communication, it is featured here.*

(The editor invites readers to submit reports for this column. Author's names — as well as those of the people, agencies, and countries involved in the projects — will be withheld upon request.)

Village clinics, the traditional outreach of mission hospitals and of private and government attempts to provide medical services in rural areas, have in recent years come under increasing criticism for failing to meet the health needs of developing countries. Why? Related incidents from my own experience in a rural clinic may give an inkling.

Once every two weeks our hospital team used to travel by Jeep the eight miles of dirt road (dusty or muddy, according to the season), set up a "clinic" in the town's small library, examine those in need of care, dispense basic medicines, and occasionally prescribe more sophisticated treatment or take a seriously ill patient back to the mission hospital. Regular bus service connected this village and our town, but usually the villagers preferred to wait for the doctor to come to them.

On one "clinic day" I examined a man who complained of a cough and low-grade fever. Nothing in the examination indicated anything serious, and I gave him medicine for treatment of his symptoms. Two weeks later, when a different doctor from the hospital attended the clinic, the patient did not come, even though patients are habitually advised to return to the clinic if they don't improve and, we later learned, this man was worse. When I returned to the village after four weeks, the man's relatives asked me to see him at home as he was unable to come the quarter mile to the clinic. I found the patient dying of advanced pulmonary tuberculosis and sent him immediately by Jeep to the hospital for emergency treatment. Only with intensive and costly care did the patient recover.

This incident and other shortcomings of the village clinic prompted us to try a different procedure when a new territory opened up not far from our hospital. We consulted the territory's Minister of Health, offering our services wherever they might be needed. Since one northern area near our base hospital had almost no medical facilities, the Health Minister welcomed our offer to work there. We went weekly on bazaar day to a small town, and at first worked in a small room in the center of town.

We were soon approached by a wealthy local landowner whose father had long ago been a patient of our mission hospital and who was eager to provide a hospital for his village. He persuaded us that we could serve more people more efficiently if we moved from the crowded clinic in the center of the market district to more spacious quarters in a building he owned and would provide rent-free on the edge of the village.

In the new location we had a waiting room, an examining room, quarters for a permanent full-time nurse whose duties would include case-finding and follow-up treatment, and even a small operating room. Yet, although we soon began to see more patients, they were not the very poor and socially disadvantaged for whom we had come in the first place. More and more, those who took advantage of our improved services were the well-to-do who were bypassing the adequate facilities and competent doctors in their own cities and larger towns to come to the foreign doctor. And their presence even more than the distance made the ordinary villager unwilling to come.

Politically, we were naive. It was some time before we realized that the wealthy

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video applications, research priorities, and reader survey results